

# Moto Mods Development Kit – Personality Cards

To help you on your way, Motorola has created several Personality Cards that can be inserted into the Reference Moto Mod. These provide end to end working examples of several Moto Mod interfaces for you to reference. Each card demonstrates a different aspect (but not nearly all) of what the platform can do.

## Temperature Sensor (SJYN1617A)

The Temperature Sensor Personality Card provides an example of a Moto Mod™ with a custom sensor. It incorporates a widely used thermistor.

This plugs into the 80 pin connector that comes with the Reference Moto Mod and displays real-time temperature on the companion Android application.

As a developer, you can use this as a reference when designing and building your own Moto Mod prototype that needs a custom sensor. The source code for both the Moto Mod firmware and companion Android application is also available for your review and use.



## Battery (SJYN1618A)

The Battery Personality Card provides an example of a Moto Mod™ with a rechargeable battery that serves the purpose of extending the battery life of a Moto Z smartphone. It can also be used as an example of how to provide autonomous power to a Moto Mod when not connected to a Moto Z. For this example card, a 300 mAh Lithium Ion battery is included along with a commonly used fuel gauge and charge IC.

This card plugs into the 80 pin connector that comes with the Reference Moto Mod.

As a developer, you can use this as a reference when designing and building your own Moto Mod prototype that needs it's own battery connection. The source code for both the Moto Mod firmware and companion Android application is also available for your review and use.



## Audio (SJYN1619A)

The Audio Personality Card provides an example of a Moto Mod™ with audio output. The included speaker uses a Class-D amplifier that is controlled using a I2S interface.

This card plugs into the 80 pin connector that comes with the Reference Moto Mod. While attached, this card will replace the internal Moto Z loudspeaker. Android audio routing rules remain unchanged, so no 3rd party application is required.

As a developer, you can use this as a reference when designing and building your own Moto Mod prototype that needs it's own audio connection. The source code for both the Moto Mod firmware and companion Android application is also available for your review and use.



## Display (SJYN1616A)

The Display Personality Card provides an example of a Moto Mod™ with an external display and shows how to interface with and control a display and backlight attached through the Moto High Speed Bridge. The included display uses a single lane DSI with a separate I2C bus used to control the backlight.

This card plugs into the 80 pin connector that comes with the Reference Moto Mod and can be used to mirror content or act as a secondary display when using the companion Android application.

As a developer, you can use this as a reference when designing and building your own Moto Mod prototype that needs a secondary display. The source code for both the Moto Mod firmware and companion Android application is also available for your review and use.

